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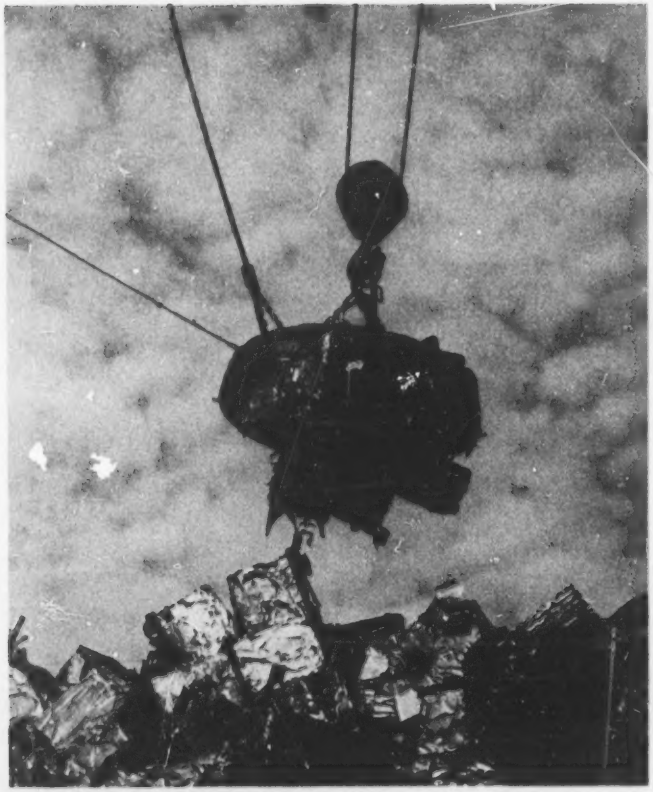
FACTS



Institute of Scrap Iron and Steel, Inc.
Representing America's Processors
of Metallic Scrap for Recycling.
1981 Yearbook • 39th Edition

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The Institute

The Institute of Scrap Iron and Steel, Inc., founded in 1928, is a national association of approximately 1500 firms—predominantly processors and brokers of ferrous and nonferrous scrap. These firms handle, process and/or ship approximately 95 percent of all purchased ferrous scrap consumed in the U.S. or exported. Member companies also include consumers of scrap metals and suppliers to the industry.

A scrap metal processor is defined as one, who, from a fixed location, utilizes machinery and equipment for processing and manufacturing iron, steel or nonferrous metallic scrap into prepared grades and whose principal product is scrap iron, scrap steel or nonferrous metallic scrap for remelting purposes.

Facts
39th Edition
1981 Yearbook

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Institute of Scrap Iron and Steel, Inc.
1627 K Street, N.W.
Washington, DC 20006
202-466-4050

Price: $5.00

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Note: All tonnage figures are in net (short) tons which equal 2,000 pounds. Scrap price tables are based on gross (long) tons equal to 2,240 pounds.

Monthly figures may not add to annual totals due to rounding or sampling differences.

Publications

"ISIS Handbook Including Specifications for Iron and Steel Scrap" ($5.00)
"Recycling Iron and Steel Scrap Saves Energy"
"Municipal Solid Waste and Resource Recovery: Position Statement and Observations"
"Tax Equity for Ferrous Scrap"
"Motor Vehicle Detitling"
"Ferrous Scrap—An International Commodity"

Phoenix Quarterly: To be placed on the complimentary mailing list to receive the Institute's award winning public interest periodical, write the Institute giving your full address. Recent issues on the following subjects are available:

Continuous Cast Steelmaking
"Steel Day"
Materials Recovery from Municipal Waste
How the Scrap Market Functions
A Look at the Steel Industry
Recycling America's Railroads
Recycling Automobile Blocks
Making Resource Recovery Economical
Industrial Auto Scrap
Steel Industry in the Eighties
Auto Theft
Scrap Exports
International Trade in Scrap
Sodium Azide and Air Bags
Gondola RR Car Shortage
Return of the Junk Car
Ferrous Scrap Backlog
Foundries
Tin Can Recycling

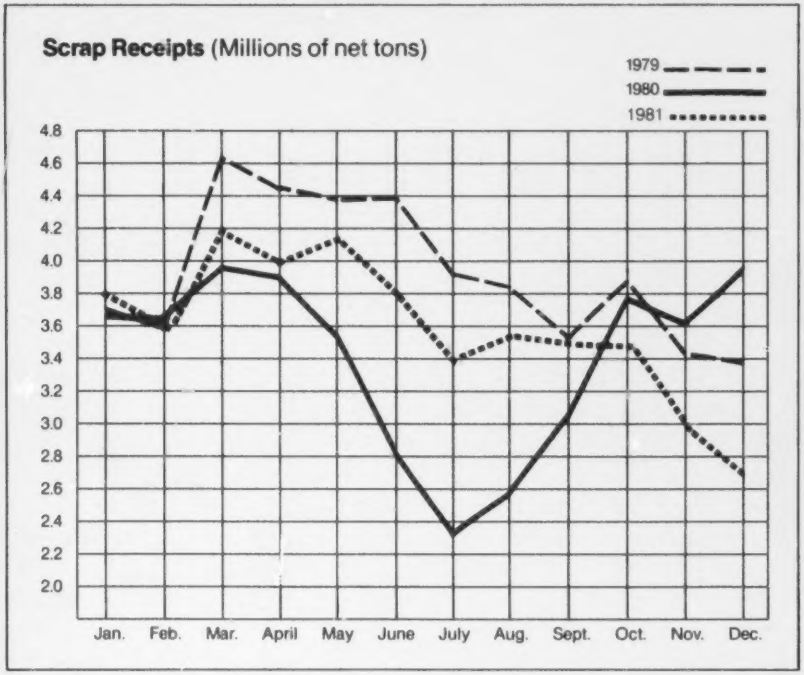
Facts

Summary

		1961	1971	1977	1978	1979	1980	1981
Ferrous Scrap for Recycling Purchased domestically by:	Steel Mills	—	22.7	26.1	30.3	32.1	29.3	30.2
	Foundries	—	11.3	15.8	15.8	14.9	11.7	11.8
	Total	**25.3**	**34.0**	**41.9**	**46.1**	**47.0**	**41.0**	**42.0**
Home Scrap Produced in:[1]	Steel Mills	—	42.8	42.4	44.9	45.4	37.0	38.4
	Foundries	—	6.6	7.1	7.2	6.8	5.2	4.8
	Total	**38.5**	**49.2**	**49.5**	**52.1**	**52.2**	**42.2**	**43.3**
Purchased & Home Scrap consumed by:[1]	Steel Mills	51.8	64.6	69.3	76.3	77.2	66.6	68.3
	Foundries	12.6	17.9	22.9	22.9	21.7	17.1	16.8
	Total	**64.3**	**82.6**	**92.2**	**99.2**	**98.9**	**83.7**	**85.1**
Exported (Includes purchased & home)[5]	Carbon***	9.7	5.52	5.95	8.78	10.75	10.86	6.24
	Stainless	**	1.00	0.08	0.11	0.11	0.12*	0.06
	Alloy***	**	0.05	0.07	0.15	0.20	0.19	0.11
Prices (Composite, yearly average in dollars per gross ton)[2]	No. 1 Heavy Melting	36.28	34.09	63.15	76.23	97.91	91.35	91.53
	No. 2 Bundles	24.72	23.55	44.11	50.28	62.89	63.71	64.31
Iron Ore[1]	Mined domestically	79.9	90.5	62.4	91.4	96.0	78.0	83.2
	Imported	28.9	44.9	42.5	37.6	37.8	28.1	31.7
	Blast furnace iron consumed	65.8	81.2	82.0	88.4	87.5	69.1	75.0
Ferrous Production	Raw Steel Production[3]	98.0	120.4	125.3	137.0	136.3	111.8	119.9
	Steel Mill Shipments[3]	66.1	87.0	91.1	97.9	100.3	83.9	87.0
	Ferrous Foundries—Castings Shipments[4]	12.8	16.3	17.5	18.1	17.2	13.8	12.0
Finished Steel Composite Price[2] (yearly average, cents-per-pound)		6.196	8.429	15.577	17.957	20.006	21.655	24.224
Steel Production[3] by type of furnace and percent of total output	Basic Oxygen Furnace	4.0	63.9	77.4	83.5	83.2	67.6	73.2
	Percent	**4.1%**	**53.1%**	**61.8%**	**60.9%**	**61.1%**	**60.5%**	**61.1%**
	Electric	8.7	20.9	27.9	32.2	33.9	31.2	33.2
	Percent	**8.8%**	**17.3%**	**22.3%**	**23.5%**	**24.9%**	**27.9%**	**27.7%**
	Open Hearth	84.5	35.6	20.0	21.3	19.2	13.0	13.5
	Percent	**86.2%**	**29.6%**	**16.0%**	**15.5%**	**14.1%**	**11.6%**	**11.3%**
Ferrous Scrap Consumption by Furnace (purchased & home)[1]	Basic Oxygen	1.4	20.1	25.0	26.0	26.5	21.9	23.3
	Blast	3.6	3.7	3.8	4.2	4.1	3.7	4.0
	Cupola	9.5	14.8	14.3	14.1	12.8	9.4	9.1
	Electric	10.1	24.7	36.4	41.3	43.6	40.2	39.6
	Open Hearth	37.9	18.8	11.1	11.8	10.5	7.4	7.5
	Other	1.9	0.8	1.6	1.9	1.5	1.2	1.5

Sources
[1]U.S. Bureau of Mines (in millions of net tons)
[2]*Iron Age*
[3]American Iron & Steel Institute (in millions of net tons)
[4]U.S. Bureau of Census (in millions of net tons)
[5]Pre-1976 U.S. Bureau of Mines; post-1975 U.S. Bureau of Census
*Preliminary
**Not reported separately; included in carbon
***Pre-1978 data adjusted for comparability with post-1977 data

Ferrous scrap consumption, purchased scrap receipts, and home scrap production—thousands of net tons



Year	Total U.S. Scrap Consumed	Purchased Scrap Receipts	Home Scrap Production
1972	93,371	41,671	51,184
1973	103,589	44,711	57,801
1974	105,483	51,334	55,250
1975	82,331	36,753	46,042
1976	89,910	41,399	50,025
1977	92,198	41,933	49,517
1978	99,224	46,068	52,082
1979	98,901	46,963	52,219
1980	83,710	40,954	42,207
1981	85,097	41,981	43,260

Source: U.S. Bureau of Mines

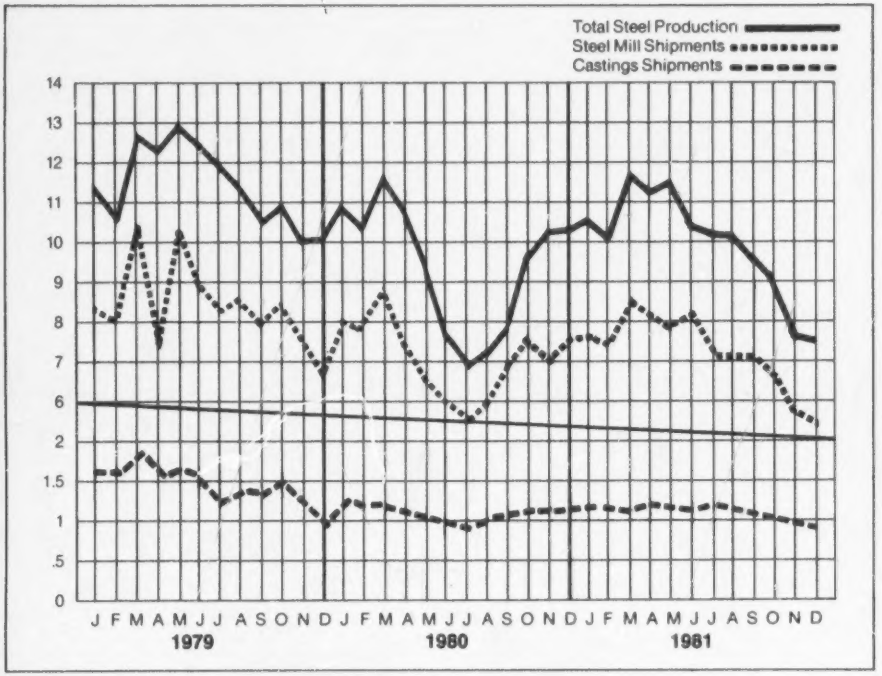
Domestic steel mills and foundries purchased 42 million net tons of ferrous scrap in 1981, a 2.5% increase over the 41 million tons purchased in 1980.

Monthly demand reached a high of 4.3 million tons in March and then began a downward trend that ended in December with only 2.7 million tons purchased. The December tonnage was the lowest since July 1980 when only 2.3 million tons were purchased.

In 1981, steel production increased 7% over the previous year, steel shipments were up 4%, but castings shipments were down 13%.

Month	Total U.S. Scrap Consumption	Purchased Scrap Receipts	Home Scrap Production
1979			
January	8,200	3,708	4,222
February	7,928	3,597	4,110
March	9,428	4,617	4,900
April	8,967	4,420	4,657
May	9,114	4,378	4,816
June	8,728	4,393	4,539
July	7,969	3,910	4,392
August	8,101	3,846	4,417
September	7,704	3,533	4,106
October	8,222	3,831	4,422
November	7,438	3,422	3,855
December	7,121	3,393	3,700
1980			
January	7,968	3,633	3,998
February	7,763	3,622	3,870
March	8,393	3,971	4,202
April	7,893	3,902	4,050
May	7,491	3,543	4,006
June	5,803	2,820	2,868
July	5,009	2,324	2,583
August	5,520	2,574	2,856
September	6,328	3,066	3,247
October	7,402	3,770	3,691
November	7,410	3,609	3,584
December	7,386	3,961	3,820
1981			
January	7,486	3,769	3,613
February	7,435	3,604	3,750
March	8,409	4,261	4,240
April	8,137	4,018	4,078
May	8,184	4,163	4,294
June	7,657	3,817	3,876
July	7,168	3,454	3,689
August	7,116	3,564	3,631
September	7,116	3,542	3,591
October	6,833	3,496	3,353
November	6,054	3,064	3,004
December	5,656	2,661	2,817

Raw steel production, steel mill and foundry castings shipments—millions of net tons



Trend of U.S. steel production by furnace—millions of net tons and by percentage[1]

Year	Basic Oxygen Tons	Basic Oxygen %	Electric Tons	Electric %	Open Hearth Tons	Open Hearth %
1972	74.6	56.0%	23.7	17.8%	34.9	26.2%
1973	83.3	55.2%	27.8	18.4%	39.8	26.4%
1974	81.6	56.0%	28.7	19.7%	35.5	24.4%
1975	71.8	61.6%	22.7	19.5%	22.2	19.0%
1976	79.9	62.4%	24.6	19.2%	23.5	18.4%
1977	77.4	61.8%	27.9	22.3%	20.0	16.0%
1978	83.5	60.9%	32.2	23.5%	21.3	15.5%
1979	83.2	61.1%	33.9	24.9%	19.2	14.1%
1980	67.6	60.5%	31.2	27.9%	13.0	11.6%
1981	73.2	61.1%	33.2	27.7%	13.5	11.3%

1. Calculated as a percentage of total steel production.
Source: American Iron and Steel Institute

Year	Total Steel Production	Steel Mill Shipments	Castings Shipments[1]
1972	133.2	91.8	17.8
1973	150.8	111.4	20.0
1974	145.7	109.5	18.7
1975	116.6	80.0	16.1
1976	128.0	89.4	17.8
1977	125.3	91.1	18.5
1978	137.0	97.9	18.8
1979	136.3	100.3	18.2
1980	111.8	83.9	13.8
1981	119.9	87.0	12.0

1. Data sample revised beginning 1975.
Source: for steel data, American Iron and Steel Institute; for castings, U.S. Bureau of the Census

Month	Total Steel Production	Steel Mill Shipments	Castings Shipments[1]
1979			
January	11,105	8,206	1,589
February	10,562	7,996	1,552
March	12,576	10,293	1,852
April	12,196	7,438	1,627
May	12,789	10,187	1,759
June	12,230	8,977	1,661
July	11,821	8,319	1,358
August	11,309	8,475	1,450
September	10,542	7,929	1,401
October	10,810	8,355	1,552
November	9,998	7,385	1,317
December	9,996	6,743	1,070
1980			
January	10,701	7,952	1,301
February	10,332	7,690	1,253
March	11,439	8,711	1,286
April	10,658	7,296	1,188
May	9,226	6,440	1,075
June	7,501	5,848	1,046
July	6,796	5,354	987
August	7,019	5,745	1,029
September	7,767	6,682	1,089
October	9,442	7,458	1,155
November	10,057	7,038	1,155
December	10,180	7,591	1,223
1981			
January	10,590	7,616	1,260
February	10,028	7,375	1,246
March	11,744	8,422	1,212
April	11,243	8,108	1,301
May	11,423	7,932	1,236
June	10,451	8,148	1,207
July	10,160	7,115	1,319
August	10,120	7,020	1,210
September	9,618	7,039	1,098
October	9,003	6,723	1,058
November	7,961	5,783	1,035
December	7,671	5,666	946

Purchased scrap receipts, home scrap production and ferrous scrap consumption by grade—thousands of net tons

Total—All Types of Manufacturers	1979 Purchased Scrap Receipts[1]	1979 Home Scrap Production	1979 Total Scrap Consumed	1980 Purchased Scrap Receipts[1]	1980 Home Scrap Production	1980 Total Scrap Consumed	1981 Purchased Scrap Receipts[1]	1981 Home Scrap Production	1981 Total Scrap Consumed
GRADE OF SCRAP									
Carbon steel:									
Low-phosphorous plate and punchings	2,081	396	2,529	1,689	357	2,108	1,713	315	2,049
Cut structural and plate	2,412	644	3,055	2,138	956	3,022	2,446	753	3,236
No. 1 heavy melting steel	8,832	18,173	27,055	8,591	14,014	22,997	8,881	14,820	23,552
No. 2 heavy melting steel	2,621	1,519	4,134	2,624	1,404	3,765	2,300	957	3,344
No. 1 and electric furnace bundles	7,672	3,018	10,820	5,628	2,383	8,255	6,345	2,666	8,907
No. 2 and all other bundles	2,686	68	2,721	2,374	501	2,608	2,037	79	2,394
Electric furnace 1 foot and under (not bundles)	369	32	399	269	23	288	278	25	305
Railroad rails	186	—	186	205	6	187	282	—	272
Turnings and borings	2,115	463	2,580	1,614	443	2,154	1,782	497	2,275
Slag scrap (Fe content 70%)	1,653	3,135	4,815	1,051	3,293	4,261	882	3,726	4,470
Shredded or fragmentized	3,810	41	3,824	4,220	66	4,058	4,097	32	4,132
No. 1 busheling	1,874	65	2,007	1,250	80	1,362	1,440	92	1,548
All other carbon steel scrap	3,400	12,260	15,544	3,442	9,742	12,903	3,280	9,921	13,037
Stainless steel scrap	406	792	1,205	363	643	1,000	431	524	934
Alloy steel (except stainless)	503	1,689	2,214	345	1,492	1,896	392	1,651	1,965
Ingot mold scrap	381	3,377	3,502	358	2,442	2,988	338	2,652	2,715
Machinery and cupola cast iron	983	751	1,727	962	594	1,566	1,070	462	1,732
Cast iron borings	1,601	678	2,280	1,120	493	1,830	1,009	321	1,428
Motor blocks	683	375	1,020	534	288	775	547	314	812
Other iron scrap	1,254	4,120	5,211	1,150	2,850	3,995	1,106	2,805	3,984
Other scrap	1,445	619	2,072	1,028	589	1,693	1,323	646	2,007
Total scrap[2]	**46,963**	**52,219**	**98,901**	**40,954**	**42,207**	**83,710**	**41,981**	**43,260**	**85,097**

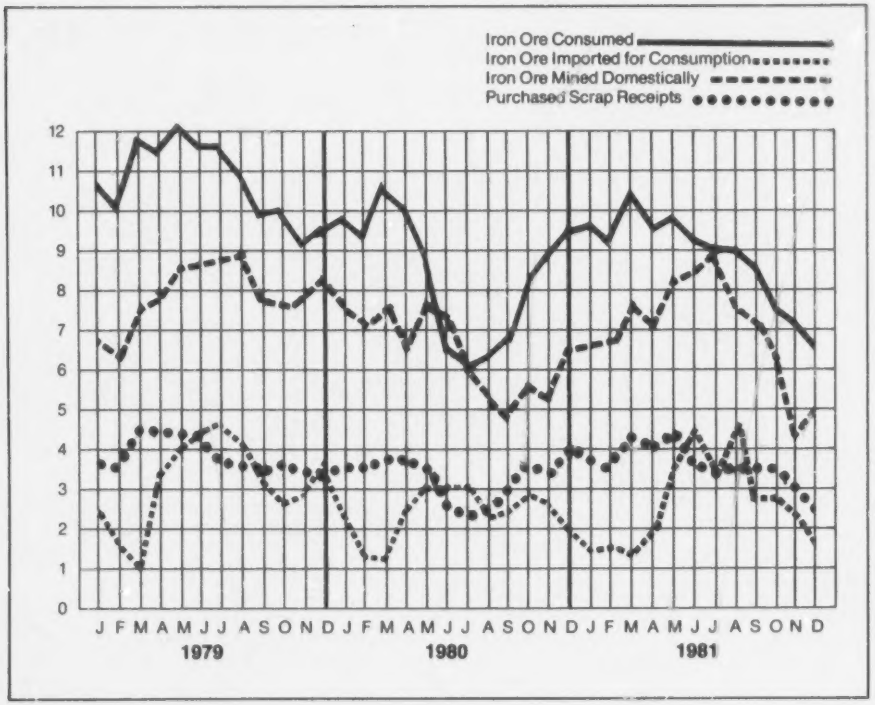
1. Receipts less shipments.
2. Data may not add to totals because of independent rounding.
Source: U.S. Bureau of Mines

U.S. consumption of ferrous scrap and blast furnace iron (BFI) by type of furnace—thousands of net tons

Year	Basic Oxygen Scrap	Basic Oxygen BFI	Blast Scrap	Cupola Scrap	Cupola BFI	Electric Scrap	Electric BFI	Open Hearth Scrap	Open Hearth BFI	Other Scrap	Other BFI	Total Consumed Scrap	Total Consumed BFI
1972	24,192	60,233	3,565	15,544	2,264	30,459	961	18,825	22,375	786	3,307	93,371	89,140
1973	27,318	68,027	4,246	15,252	2,276	35,353	1,379	20,557	25,477	863	2,657	103,589	99,816
1974	26,614	66,614	4,558	15,640	2,123	37,476	1,220	19,159	22,507	2,037	4,328	105,483	96,792
1975	23,392	59,210	3,931	11,749	1,362	29,850	1,019	11,780	14,554	1,629	3,493	82,331	79,638
1976	26,204	66,138	3,692	13,341	1,197	32,301	638	12,337	15,410	2,035	3,661	89,910	87,045
1977	25,034	63,877	3,771	14,325	1,241	36,414	993	11,087	12,531	1,567	3,361	92,198	82,003
1978	26,006	69,028	4,185	14,077	1,056	41,289	1,440	11,768	13,444	1,899	3,453	99,224	88,420
1979	26,496	68,526	4,117	12,774	1,026	43,555	905	10,478	12,865	1,481	4,135	98,901	87,457
1980	21,859	56,414	3,651	9,440	698	40,154	855	7,445	8,606	1,160	2,481	83,710	69,053
1981	23,278	62,162	4,046	9,113	685	39,642	583	7,498	8,867	1,520	2,743	85,097	75,040

Source: U.S. Bureau of Mines

Iron Ore—millions of net tons



Iron Ore Consumption—Millions of net tons

Month	1979	1980	1981
January	10.6	9.7	9.7
February	10.1	9.3	9.1
March	11.8	10.5	10.4
April	11.5	10.0	9.8
May	12.2	8.9	9.9
June	11.6	6.5	9.1
July	11.6	6.1	9.0
August	10.9	6.3	9.0
September	9.9	6.7	8.6
October	10.0	8.1	7.7
November	9.1	8.8	7.1
December	9.5	9.3	6.8

Source: U.S. Bureau of Mines

Iron Ore Imported for Consumption—Millions of net tons

Month	1979	1980	1981
January	2.4	2.1	1.4
February	1.7	1.3	1.5
March	1.0	1.2	1.3
April	3.2	2.4	2.0
May	4.0	3.0	3.2
June	4.5	3.0	4.3
July	4.7	3.0	3.4
August	4.1	2.3	4.6
September	3.3	2.3	2.9
October	2.7	2.8	2.9
November	2.8	2.6	2.3
December	3.5	2.0	1.8

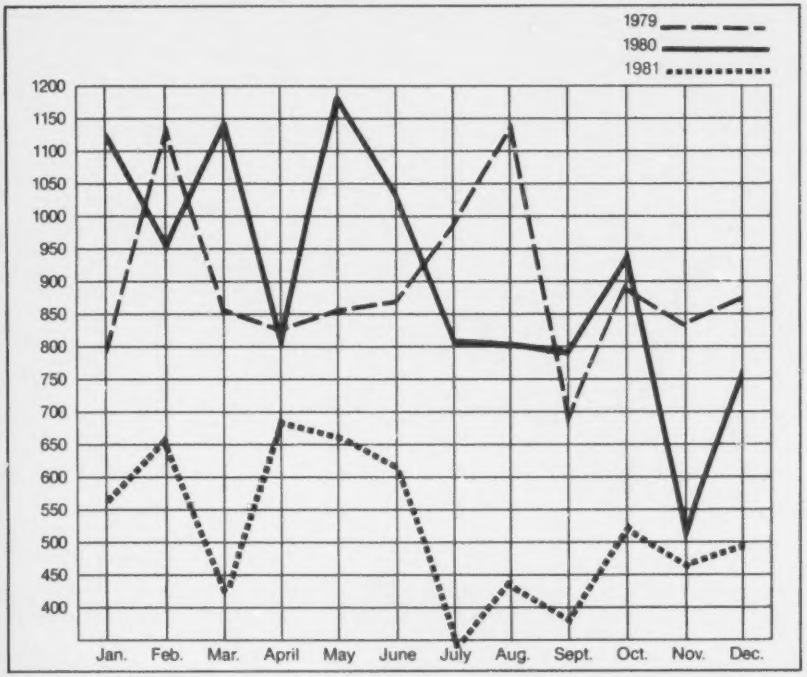
Source: U.S. Bureau of Mines

Iron Ore Mined Domestically—Millions of net tons

Month	1979	1980	1981
January	6.9	7.7	6.7
February	6.3	7.1	6.8
March	7.5	7.5	7.6
April	7.9	6.8	7.0
May	8.5	7.7	8.1
June	8.7	7.2	8.4
July	8.8	6.0	9.0
August	8.9	5.3	7.7
September	7.9	4.9	7.1
October	7.8	5.6	6.4
November	7.9	5.2	4.4
December	8.3	6.6	5.0

Source: U.S. Bureau of Mines

U.S. exports of carbon steel and iron scrap—thousands of net tons



U.S. Exports of Carbon Steel and Scrap—Thousands of net tons			
Month	1979	1980	1981
January	795	1,122	564
February	1,137	954	651
March	856	1,147	425
April	827	802	681
May	855	1,186	658
June	863	1,040	617
July	983	813	340
August	1,134	803	444
September	696	795	385
October	891	936	519
November	837	507	463
December	874	751	498

Source: U.S. Department of Commerce

U.S. exports of ferrous scrap[1] by country[2]—thousands of net tons

Country	1977	1978	1979	1980	1981
Canada	523	795	861	790	737
Mexico	342	450	814	1,125	897
Bangladesh	28	18	44	22	69
Greece	300	340	500	545	271
India	—	42	89	92	335
Qatar	19	71	119	34	57
Japan	1,044	3,190	2,922	2,838	1,191
Korean Rep	1,540	1,503	1,418	1,736	1,241
Pakistan	72	6	2	61	121
Spain	788	744	1,400	1,139	434
Taiwan	446	394	634	990	374
Turkey	326	257	242	318	364

1. Includes all grades.
2. Canada and Mexico plus ten largest importing countries in current year; dash means separate total not available.

Source: U.S. Department of Commerce

Ferrous scrap exports plummeted to 6.2 million net tons in 1981, a 42% decline from the 10.9 million tons shipped in 1980. It was the lowest year of scrap exports since 1977 when only 5.9 million tons were shipped. Alloy steel scrap exports totaled 108,000 tons, also off 42% from 1980, while stainless steel scrap exports were down 46% from the previous year.

Carbon steel and iron scrap exports achieved their highest monthly level in April, but by July the tonnage had slipped to the lowest monthly export level in 10 years. The balance of the year resulted in only a modest recovery.

For the first time since 1977, the Republic of Korea displaced Japan as the leading importer of U.S. ferrous scrap. Among the 10 largest foreign purchasers in 1981, Qatar and Bangladesh displaced Italy and Germany which in 1980 occupied the fifth and tenth positions respectively.

U.S. exports of ferrous scrap by grade—thousands of net tons

Grade	1977	1978	1979	1980	1981
Alloy steel scrap[1]	66	148	195	186	108
Stainless steel scrap[2]	75	115	112	118	63
No. 1 heavy melting scrap	1,750	2,362	2,697	2,907	1,606
No. 2 heavy melting scrap	594	837	1,117	1,067	618
No. 1 baled steel scrap	103	148	145	119	41
No. 2 baled steel scrap	336	326	652	314	273
Shredded steel scrap	1,606	2,684	2,980	3,323	1,923
Borings, shovelings and turnings	476	741	889	769	486
Other steel scrap[1,3]	535	1,233	1,633	1,575	796
Iron scrap	314	434	632	783	501
Rerolling material[1]	235	—	—	—	—
Iron and steel scrap	5,949	8,775	10,745	10,857	6,244

1. Pre-1978 data adjusted for comparability.
2. Subject to revision for 1980.
3. Includes terneplate and tinplate.

Source: U.S. Department of Commerce

U.S. imports of ferrous scrap, iron ore, pig iron and steel products—millions of net tons

Year	Scrap[1]	Iron Ore	Pig Iron	Steel
1972	0.3	40.1	0.6	18.2
1973	0.3	48.5	0.4	15.6
1974	0.2	53.8	0.3	16.8
1975	0.3	52.4	0.5	12.5
1976	0.5	49.7	0.4	15.0
1977	0.6	42.5	0.4	19.9
1978	0.8	37.6	0.7	22.0
1979	0.8	37.8	0.5	18.4
1980	0.6	28.1	0.5	15.5
1981	0.6	31.7	0.5	19.9

1. Includes tinplate.

Source: U.S. Bureau of Mines

In 1978 the government revision of categories for reporting foreign trade affected scrap iron and steel data in ways which limit *precise* comparison between scrap export data for the two periods.

The new classification divided ferrous scrap grades into two major groupings: "carbon steel and iron" and "alloy steel." This change required the former grade "other steel scrap," containing both carbon and alloy steel material, to be reclassified as two separate grades.

For the years in which data are available (1978-81), the carbon steel portion represented about 89% and the alloy steel portion, 11% of the volume formerly reported as "other steel scrap." Thus, for years prior to 1977 the volume of alloy steel reported above is based on an ISIS computation allocating 11% of the "other steel scrap" volume to the grade "alloy steel scrap" (and retaining 89% in the carbon steel grade "other steel scrap").

The new categorization also subdivided the grade "rerolling material" and assigned portions of that tonnage to one non-scrap commodity, used rail, and to four ferrous scrap grades. The assignment suggests that the used rail tonnage once part of the former rerolling category is material used for rerolling, not scrap, purposes. Inclusion of used rail in scrap export figures prior to 1978 overstates the trade volume absent any adjustment.

In evaluating the contention raised by advocates of export controls that more scrap left the U.S. in 1980 than in 1973, the comparison should be confined to ferrous scrap data. Rerolling material which is used rail can be eliminated by subtracting the greatest reported volume of used rail exports (86,000 nt) from the Commerce Department's rerolling figures for the years before 1978. For example, in the table above the 1977 volume of rerolling material reported by Commerce (321,000) has been adjusted downward by 86,000 to 235,000. When this adjustment is reflected in export data before 1978, the 1980 level established no record high.

The conclusion holds, given the most conservative nature (high value) of the adjustment; of course, any adjustment of less magnitude would make the conclusion even more evident.

No. 1 heavy melting steel scrap composite price[1]—dollars per gross ton

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1981	$ 98.58	$ 99.50	$105.23	$101.75	$ 95.42	$ 89.37	$ 90.17	$ 94.63	$ 90.42	$ 81.17	$ 75.63	$ 76.42	$ 91.53
1980	99.67	105.00	101.17	92.25	77.50	69.70	76.08	84.42	94.43	95.91	98.50	101.57	91.35
1979	97.56	110.75	119.75	99.96	97.75	100.83	96.10	90.33	88.08	87.30	92.50	94.10	97.81
1978	70.56	72.08	74.25	76.08	71.90	74.76	77.75	76.33	72.91	74.83	83.41	89.91	76.23
1977	72.17	72.33	73.50	71.92	65.30	61.91	61.25	61.37	58.83	49.10	49.50	60.59	63.15
1976	72.16	78.08	89.03	91.75	83.75	84.50	87.33	79.56	70.41	64.00	63.77	69.17	77.79
1975	78.00	79.25	85.03	86.08	81.75	67.06	58.21	69.58	73.46	62.04	58.50	63.41	71.86
1974	83.67	107.00	122.38	124.37	95.55	110.21	127.60	115.09	115.04	119.58	101.50	80.24	108.51
1973	48.24	49.08	47.75	48.22	51.66	54.16	54.09	54.91	58.83	69.02	80.83	78.58	57.95
1972	33.50	35.54	35.08	35.25	35.50	35.25	36.03	37.58	38.33	38.23	39.25	43.16	36.89

1. Average price of No. 1 heavy melting steel scrap delivered to consumers at Pittsburgh, Philadelphia and Chicago.
Source: *Iron Age*

No. 2 bundles composite price[1]—dollars per gross ton

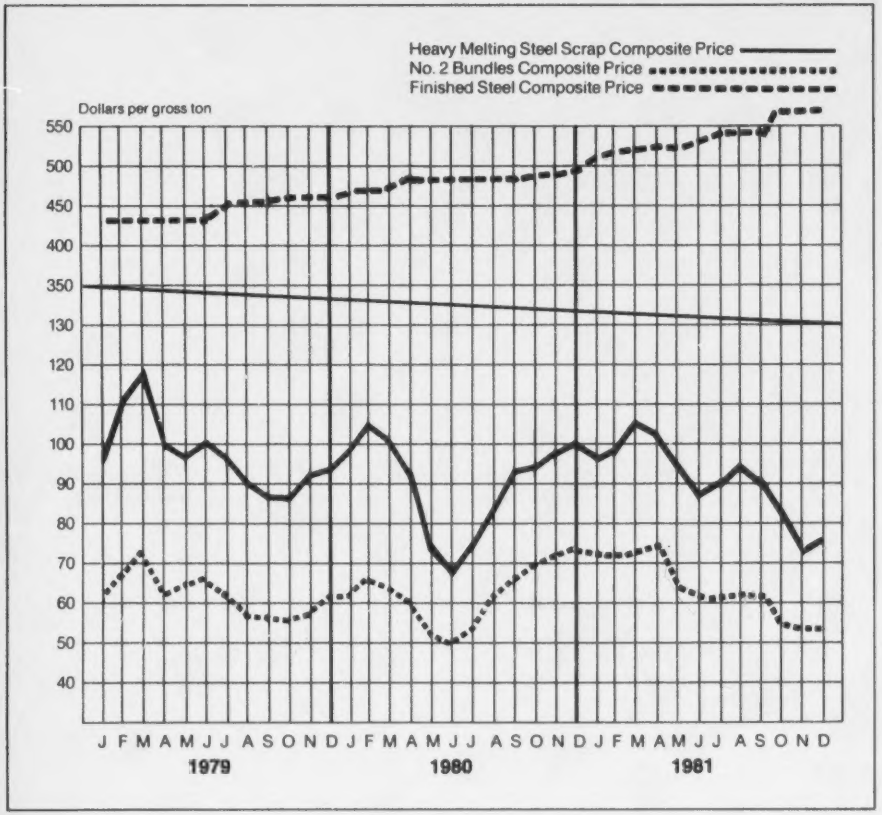
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1981	$71.83	$71.83	$73.83	$75.08	$68.08	$61.57	$61.58	$62.50	$61.66	$56.50	$53.43	$53.75	$64.31
1980	62.50	67.41	65.90	60.83	53.83	50.70	54.00	62.66	67.90	70.91	72.75	75.23	63.71
1979	61.56	68.17	73.25	63.43	65.75	67.50	62.76	58.58	57.41	56.76	58.58	61.03	62.89
1978	47.90	49.25	50.50	51.17	48.50	49.03	51.16	49.75	47.50	47.83	53.66	57.16	50.28
1977	49.30	48.75	50.08	50.25	46.03	42.58	41.83	43.56	41.83	36.10	36.00	43.00	44.11
1976	47.33	52.00	62.30	64.92	62.83	63.43	64.50	56.90	51.00	44.91	44.70	47.66	55.20
1975	46.42	47.00	47.49	49.29	49.16	44.13	40.54	43.58	45.20	42.41	42.00	42.83	45.00
1974	48.92	58.96	68.75	69.13	55.17	57.12	60.37	56.83	58.97	60.50	54.38	47.33	58.03
1973	34.65	35.53	34.99	35.36	38.57	40.41	38.50	37.83	39.08	41.89	48.66	47.66	39.43
1972	23.24	24.58	24.58	24.84	25.24	25.17	24.83	25.16	25.66	26.33	26.58	29.41	25.46

1. Average price of No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago.
Source: *Iron Age*

Finished steel composite price[1]—cents per pound

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1981	22.901	23.362	23.598	23.776	23.776	24.232	24.488	24.488	24.488	25.195	25.195	25.195	24.224
1980	20.943	21.038	21.168	21.739	21.739	21.739	21.736	21.736	21.736	21.982	22.019	22.286	21.655
1979	19.549	19.549	19.549	19.606	19.637	19.668	20.253	20.311	20.311	20.547	20.547	20.547	20.006
1978	16.294	17.324	17.393	17.670	17.670	17.670	17.875	18.719	18.719	18.719	18.719	18.719	17.957
1977	15.146	15.146	15.146	15.146	15.146	15.146	15.941	15.941	16.043	16.043	16.043	16.043	15.577
1976	13.693	13.693	13.693	13.693	13.835	14.186	14.502	14.598	14.598	14.598	14.598	14.880	14.213
1975	12.739	12.928	12.928	12.928	12.928	12.920	12.912	12.912	12.961	13.692	13.693	13.693	13.102
1974	9.456	9.480	9.480	10.033	10.033	11.108	12.075	12.346	12.389	12.433	12.433	12.433	11.141
1973	9.363	9.363	9.363	9.363	9.363	9.363	9.363	9.363	9.363	9.432	9.432	9.432	9.380
1972	9.014	8.998	8.998	8.998	8.998	8.998	8.998	8.998	8.998	8.998	8.998	8.998	8.999

1. Weighted index of steel bars, shapes, plates, wire, rails, black pipe, hot and cold rolled sheets and strips.
Source: *Iron Age*



The average annual price of No. 1 Heavy Melting Steel Scrap in 1981 was $91.53, virtually unchanged from the $91.35 average in 1980.

The highest monthly average composite price for No. 1 Heavy Melting Scrap was $101.75 in March. By December the price had fallen to $76.42, a drop of 27%.

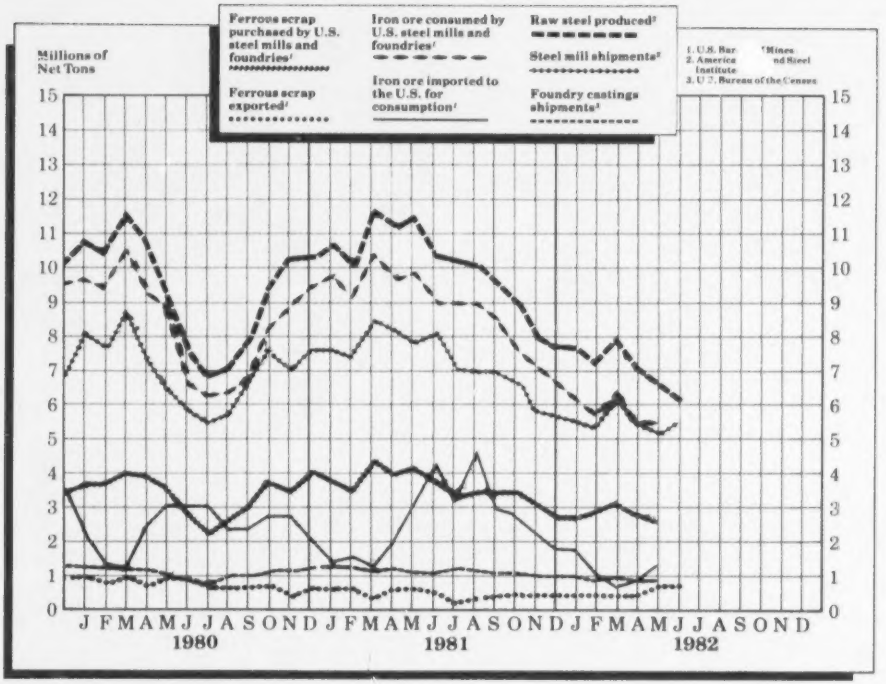
Although scrap prices dropped 22% from January to December, the finished steel composite price increased 10% in that same 12-month period.

As can be seen in the chart, the movement of the Finished Steel Composite Price is not influenced by movements in the scrap composite prices.

Scrap composite prices are helpful primarily in reflecting the general movement of scrap prices. The composite for each scrap grade is based on a simple average of prices at Pittsburgh, Philadelphia, and Chicago, representing three important cities among some 17 regional U.S. markets for which prices are published. It would be extremely unusual if significant volumes of scrap were purchased at the actual composite price. In the case of months when there are limited or no scrap transactions, the published price may reflect a sense of the market, (or part of the market) were it functioning.

The two scrap price series—No. 1 Heavy Melting Steel Scrap and No. 2 Bundles—include transportation costs to the steel mill or foundry purchasing the material. For example, if the No. 2 Bundle price is $58.33, the freight rate (which could range from $5.00 to $18.00 a ton and up depending upon the total weight and distance involved) must be subtracted to determine the amount received by the processor.

By contrast, the Finished Steel price does not include transportation charges. It is the price of the steel product at the mill and consequently, is not influenced by changes in freight charges.


Ferrous scrap purchased by U.S. steel mills and foundries[1]
Ferrous scrap exported[1]
Iron ore consumed by U.S. steel mills and foundries[1]
Iron ore imported to the U.S. for consumption[1]
Raw steel produced[2]
Steel mill shipments[2]
Foundry castings shipments[3]
1. U.S. Bur
2. America
Institute
3. U.S. Bureau of the Census
Millions of Net Tons
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1980
1981
1982